

**UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Civil Action No. 1:19-cv-12551-FDS

Hon. F. Dennis Saylor IV

ORAL ARGUMENT REQUESTED

**MEMORANDUM OF LAW IN SUPPORT OF PLAINTIFF'S
MOTION FOR PARTIAL SUMMARY JUDGMENT OF VALIDITY
BASED UPON *INTER PARTES* REVIEW ESTOPPEL
UNDER 35 U.S.C. § 315(e)(2)**

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Plaintiff, Singular Computing LLC (“Singular”), respectfully submits this memorandum of law in support of its motion for partial summary judgment of validity based upon *inter partes* review estoppel pursuant to 35 U.S.C. § 315(e)(2). For the reasons set forth herein, Singular requests that the motion be granted.

I. BACKGROUND

Singular filed the complaint in this case on December 20, 2019, alleging that defendant, Google LLC (“Google”), has infringed the three patents-in-suit, namely: U.S. Patent No. 8,407,273 (“the ’273 patent”); U.S. Patent No. 9,218,156 (“the ’156 patent”); and U.S. Patent No. 10,416,961 (“the ’961 patent”). *See* Dkt. No. 1. Singular filed an amended complaint alleging infringement of the same three patents on March 20, 2020. *See* Dkt. No. 37. Google answered the amended complaint on July 9, 2020. *See* Dkt. No. 53.

Between October 30 and November 6, 2020, Google filed six requests for *inter partes* review (“IPR”) of the patents-in-suit, alleging, *inter alia*, that each of the claims asserted in this case is invalid for obviousness under 35 U.S.C. 103. The Patent Trial and Appeal Board (“PTAB”) assigned the following IPR numbers to the requests:

Patent No.	IPR No.
’961 (inventor prior art)	IPR2021-154
’961 (third party prior art)	IPR2021-155
’156 (inventor prior art)	IPR2021-164
’156 (third party prior art)	IPR2021-165
’273 (inventor prior art)	IPR2021-178
’273 (third party prior art)	IPR2021-179

The PTAB denied institution for IPR2021-154, IPR2021-164 and IPR2021-178 and granted institution for IPR2021-155, IPR2021-165 and IPR2021-179.

After a consolidated trial, the PTAB issued a Final Written Decision (“FWD”) in each of instituted proceedings. The PTAB found as follows:

Patent No.	Claims upheld	Claims found invalid
'961 IPR2021-00155	3, 23	1-2; 4-5; 10; 13-14; 21; 24-25
'156 IPR2021-00165	3-8	1-2; 16; 33
'273 IPR2021-00179	3-20; 25; 34-61; 63; 67-70	1-2; 21-24; 26; 28; 32-33

*See Ex. A-C.*¹ Thus, asserted claims 7 of the '156 patent and 53 of the '273 patent were held valid. Asserted claims 4 and 13 of the '961 patent were held invalid.²

II. APPLICABLE LAW

Pursuant to Fed. R. Civ. P. 56, courts “shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247 (1986). The moving party bears the initial burden of informing the court of the basis for its belief that there is no genuine issue for trial.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). The burden then shifts to the nonmovant to establish that there is a genuine issue of material fact. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586-87 (1986).

A party may challenge the validity of a patent claim by requesting the PTAB to institute IPR proceedings. 35 U.S.C. § 311(a). A party that pursues IPR proceedings will be estopped from subsequently asserting invalidity in district court litigation based on patents and printed publications that the party raised or “reasonably could have raised” during the IPR proceedings. 35 U.S.C. § 315(e)(2); *see also Cal. Inst. of Tech. v. Broadcom Ltd.*, 25 F.4th 976, 991 (Fed. Cir. 2022). Accordingly, a party is estopped in subsequent district court litigation from asserting

¹ Unless otherwise noted, all exhibits are attached to the accompanying Declaration of Kevin Gannon.

² As indicated at the recent Status Conference, Singular does not intend to pursue the '961 patent further in this case. Singular has provided a draft covenant not to sue to Google for review.

invalidity based on any prior art of which it was aware at the time it filed its petitions and could have included in the petition(s) for IPR. *Id.*

IPR estoppel applies and becomes effective when the PTAB issues a FWD. *Id.* at 989; *see also WesternGeco LLC v. ION Geophysical Corp.*, 889 F.3d 1308, 1318 (Fed. Cir. 2018).

The party seeking to invoke statutory IPR estoppel has the initial burden of making a showing that it applies. *SiOnyx, LLC v. Hamamatsu Photonics K.K.*, 330 F. Supp. 3d 574, 602-03 (D. Mass. 2018); *see also Palomar Techs., Inc. v. MRSI Sys., LLC*, No. 18-10236, 2020 WL 2115625, at *4 (D. Mass. May 4, 2020).

III. ARGUMENT

The scope of IPR estoppel is broad. *See, e.g., Parallel Networks Licensing, LLC v. Int’l Bus. Machs. Corp.*, No. 13-2071, 2017 WL 1045912, at *11 (D. Del. Feb. 22, 2017), *aff’d*, 721 Fed. Appx. 994 (Fed. Cir. 2018). Having elected to challenge the validity of the patents-in-suit via IPR, Google must now face the consequences in this litigation. *Intuitive Surgical, Inc. v. Ethicon LLC*, 25 F.4th 1035, 1043 (Fed. Cir. 2022) (IPR estoppel intended to “discourage ‘abusive serial challenges to patents’”) (citation omitted).

Pursuant to 35 U.S.C. 315(e)(2), Google is now estopped from asserting invalidity based on any patents and printed publications it raised or “reasonably could have raised” during the IPR proceedings in the PTAB. This is so because “[a]llowing [Google] to raise arguments here that it elected not to raise during the IPR would give it a second bite at the apple and allow it to reap the benefits of the IPR without the downside of meaningful estoppel.” *See, e.g., Parallel Networks*, 2017 WL 1045912, at *12.

A. ART CITED BY GOOGLE IN THE IPR PROCEEDINGS

As shown above, the PTAB issued FWDs in three of the IPRs in which, *inter alia*, the validity of the asserted claims of the '273 patent and the '156 patent was confirmed.

Accordingly, Google is now estopped from arguing here that the upheld claims are invalid based on the prior art that it relied upon in the PTAB proceedings. *See, e.g., Cal. Tech. v. Broadcom*, 25 F.4th at 991; *see also SiOnyx v. Hamamatsu*, 330 F. Supp. 3d at 600-01. That art includes the following references that Google argued in the instituted IPR proceedings render the challenged claims invalid:

U.S. Patent App. Publ. No. 2007/0203967 ("Dockser")
Tong et al., <i>Reducing Power by Optimizing the Necessary Precision/Range of Floating Point Arithmetic</i> , <i>IEEE Transactions on VLSI Systems</i> , Vol. 8, No. 3, June 2000 ("Tong")
U.S. Patent No. 5,689,677 ("MacMillan")

See Ex. D, p. 4; Ex. E, p. 4; Ex. F, p. 4.

Google is also estopped from making any invalidity arguments that it "reasonably could have made" in the IPR proceedings. *See* 35 U.S.C. 315(e)(2); *see also Cal. Tech. v. Broadcom*, 25 F.4th at 991. In addition to the prior art listed above that Google specifically relied upon, Google also identified a number of additional patents and printed publications in its petitions for IPR. Although it did not argue that these references *per se* render the challenged claims invalid, Google cited the references, *inter alia*, for background purposes.

These additional prior art references are referenced in Google's petitions and Appendix of IPR Exhibits. *See* Ex. G.³ Google is now estopped from now arguing invalidity based on any and/or all of those prior art references and any others identified in its petitions because it

³ The Appendix is the same in each of the six Requests for IPR.

reasonably could have made such arguments to the PTAB in its petitions for IPR. *See Cal. Tech. v. Broadcom*, 25 F.4th at 991; *see also SiOnyx v. Hamamatsu*, 330 F. Supp. 3d at 600-01.

B. OTHER PRIOR ART KNOWN TO GOOGLE WHEN IT FILED FOR IPR

A party is also estopped from asserting invalidity based on any art of which it was aware and, therefore, could have included in its petition(s) for IPR. As the Federal Circuit has stated:

It is undisputed that Apple and Broadcom were aware of the prior art references that they sought to raise in the district court when Apple filed its IPR petitions. Despite not being included in any of Apple's IPR petitions, the contested grounds reasonably could have been included in the petitions, and thus in the IPR. We affirm the district court's decision barring Apple and Broadcom from raising invalidity challenges based on these prior art references.

Cal. Tech. v. Broadcom, 25 F.4th at 991; *see also Palomar v. MRSI*, 2020 WL 2115625, at *3.

The same bar applies here.

Google filed its three petitions for IPR that resulted in FWDs on October 30 and November 5-6, 2020. *See* Exs. D-F. On November 6, 2020, Google also served Singular with Google's "RESPONSIVE CONTENTIONS REGARDING NON-INFRINGEMENT AND INVALIDITY." *See* Ex. H. With those Contentions, Google also served claim charts 1-17 that contain multiple prior art printed publications alleged to disclose each element of the claims. *See* Exs. I-Y.

Accordingly, Google was aware of all of the prior art patents and printed publications contained in its Invalidity Contentions and claim charts at the time it filed the requests for IPR. Therefore, Google reasonably could have included these prior art references and arguments in its petitions for IPR. *See Cal. Tech. v. Broadcom*, 25 F.4th at 991. As a result, Google is estopped from arguing invalidity in this case based on the patents and other printed publications identified in its Invalidity Contentions and claim charts served on November 6, 2020. *Id.*; *see also IOENGINE, LLC v. PayPal Holdings, Inc.*, No. 18-452, 2022 WL 2800861, at *30 (D. Del. Jun.

15, 2022) (Bryson J) (IPR estoppel extends to prior art disclosed in invalidity contentions); *Snyders Heart Valve LLC v. St. Jude Med.*, No. 18-2030, 2020 WL 1445835, at *8 (D. Minn. Mar. 25, 2020) (same).

In the Order On Google’s Motion For Leave To Supplement Its Non-Infringement And Invalidity Contentions dated October 28, 2022 (“October 28 Order”), the Court ruled that, due to IPR estoppel, Google may not rely upon the Lienhart or Hamada references in this case because Google was aware or should have been aware of the references at the time it filed for IPR. *See* Dkt. No. 375, at pp. 4-6. The same is true with respect to all of the prior art identified in Google’s invalidity contentions and claim charts because the contentions and charts were served at the time that Google filed its petitions for IPR. Otherwise, as the Court stated in the October 28 Order, Google would unfairly be permitted to avoid the statutory consequences of IPR:

Put another way, those publications are prior art whether they stand alone, are offered in combination with each other, or are offered in combination with a system. A party cannot “simply swap[] labels for what is otherwise a patent or printed publication invalidity ground in order to ‘cloak’ its prior art ground and ‘skirt’ estoppel”

October 28 Order, at p. 6 (citations omitted). Google is estopped from asserting invalidity based upon the patents and printed publications identified in its Invalidity Contentions and claim charts.

C. DEVICE PRIOR ART

Google is also IPR-estopped from basing any anticipation or obviousness arguments on the computing devices disclosed in its Invalidity Contentions and claim charts. For example, the claim charts disclose several purported prior art devices, including the GRAPE-3 device. *See* Ex. W. Devices cannot be relied upon as invalidating prior art in IPR proceedings. *See, e.g., SiOnyx v. Hamamatsu*, 330 F. Supp. 3d at 603 (citing 35 U.S.C. § 311(b)). That does not mean,

however, that prior art devices automatically fall outside the broad scope of IPR estoppel. *Id.* (“a party may not escape estoppel by dressing up a ground based on publicly available datasheets as a ground based on a product”); *see also Biscotti Inc. v. Microsoft Corp.*, No. 2:13-cv-1015, 2017 WL 2526231, at *8 (E.D. Tex. May 11, 2017).

All the devices identified in Google’s invalidity contentions are described solely in the publicly-available prior art documents that Google cites in its contentions and had in its possession at the time it filed its petitions for IPR.⁴ For example, in its invalidity chart for the GRAPE-3 device, Google sets forth an element-by element comparison citing solely to alleged prior art printed publications that Google asserts describe the structure and operation of the device. *See Ex. W.* Google represents that each element of the asserted claims is found in the prior art printed publication describing the device. *Id.* In all seventeen charts, Google mapped the elements of the claims solely to the cited prior art printed publications purportedly describing the structure and operation of the respective device. *See Exs. I-Y.*

Google was aware of all of these publications at the time it requested IPR because its served its contentions at the time it filed its petitions for IPR. As a result, these devices also fall within the scope of IPR estoppel. *See, e.g., Wasica Fin. GmbH v. Schrader Int’l Inc.*, 432 F. Supp. 3d 448, 453-54 (D. Del. 2020) (defendant estopped from relying upon a device that was “cumulative” to documents describing its features that could have been submitted as printed publications for IPR), *appeal dismissed*, 2020 WL 8374870 (Fed. Cir. Sept. 24, 2020); *see also Cal. Inst. of Tech. v. Broadcom Ltd.*, No. CV 16-3714, 2019 WL 8192255, at *8 (C.D. Cal. Aug. 9, 2019), *aff’d*, 25 F.4th 976 (Fed. Cir. 2022).

⁴ Google did not produce any actual prior art devices during discovery.

As Judge McCalla of the Western District of Tennessee succinctly framed the issue:

the inquiry is whether the . . . physical product is the only available material that cites certain limitations. Here, the relevant claim limitations, such as a probe for delivering RF energy, the use of cooling fluid, and a temperature sensor, were adequately described in the publicly available documents . . .

Avanos Med. Sales, LLC v. Medtronic Sofamor Danek USA, Inc., No. 2:19-cv-02754, 2021 WL 8693677, at *2 (W.D. Tenn. Oct. 8, 2021) (cleaned up). Similarly here, Google expressly represents in its Invalidity Contentions that the prior art printed publications it relies upon (and has known about since when it filed its petitions for IPR) describe each element of the asserted claims. Nonetheless, Google chose not to assert those printed publications in its petitions for IPR. Google is not permitted a second bite at the apple in this Court by relying instead upon the devices described in those publications. *See, e.g., Parallel Networks*, 2017 WL 1045912, at *12 (“[a]llowing [Google] to raise arguments here that it elected not to raise during the IPR would give it a second bite at the apple and allow it to reap the benefits of the IPR without the downside of meaningful estoppel”).

IV. CONCLUSION

For the reasons set forth above, Singular requests that this motion for partial summary judgment based on IPR estoppel be granted.

Dated: November 3, 2022

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that on November 3, 2022, all counsel of record who have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system.

/s/ Paul J. Hayes